

REMARKS

Claims 1-4 are all the claims pending in the application. Claims 1-4 are all the claims pending in the application.

Newly submitted claim 4 is withdrawn from consideration by the Examiner because it is allegedly directed to an invention that is independent or distinct from the invention originally claimed.

Applicants respectfully submit that contrary to the Examiner's analysis, claims 3 and 4 are not mutually exclusive. Claim 3 generically recites that the heating means and injector means are situated at a fixed angle. This is best shown in Fig. 1. The heating means and injector means are also movable with respect to each other, as shown in Figs. 4 and 5. Thus, the main axis of the injector means may be offset from the main axis of the heating means, but of course, this does not contradict with the two axes having a fixed angle therebetween. To fully appreciate the invention, the Examiner should view the invention from a three-dimensional perspective.

In view of the foregoing, claim 4 is not believed to be mutually exclusive of claim 3. Moreover, even if the Examiner maintains that claim 4 is drawn to a separate species, this claim should be allowable upon the allowance of claims 1-3, since these claims are generic.

The proposed drawing corrections filed June 1, 2001 have been approved. However, the Examiner now objects to the drawings for failing to include reference character "d" in the Figures. Applicants amend Figure 5 as shown in the attached Request for Approval of Drawing Corrections to overcome this objection.

Claim 3 is rejected under 35 U.S.C. § 112, first and second paragraphs.

With respect to the first paragraph rejection, the Examiner asserts that the invention according to claim 3 finds no support in the specification due to the previous amendment of

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claim 1. First, the Examiner submits that the insertion of the language, “with respect to each other” in claim 1, has triggered this § 112 rejection of claim 3. However, this language merely clarified the original limitation which stated that the “relative positions” of the heating and injector means are adjusted. Thus, it is not understood why this clarifying language would now trigger the § 112 rejection.

Second, Applicants note that when the heating and injector means are viewed along the longitudinal axis of the preform, the main axes of the heating and injector means are at a fixed angle, even if the heating and injector means’ positions are adjusted with respect to each other and/or offset from each other. Applicants request that the Examiner review the specification in detail, along with the illustrations in Figs. 1, 4 and 5, in order to appreciate the present invention.

Moreover, with respect to the rejection under second paragraph, Applicants note that each of the injector means and heating means has an axis in its own plane and thus it is possible for each of the injector and heating means to lie in its respective plane, and move along the longitudinal axis of the preform while maintaining a fixed angle. The Examiner appears to have misinterpreted the claim language, since the claims clearly state that each axis is in its respective plane. See Fig. 1. Therefore, the claims do not require any contradictory arrangements.

In view of the foregoing, the § 112 rejections of claim 3 should be withdrawn.

Claims 1-3 are rejected under 35 U.S.C. § 102(b) as being anticipated by Powers (4,568,370).

Analysis

Claim 1 is the only claim in independent form; therefore, the following analysis is initially directed to this independent claim.

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Applicants respectfully maintain that Powers fails to teach or suggest the relative positioning of a heating means and associated injector means as in the claimed invention.

The Examiner argues that “40” represents heating means, and “41” represents injector means. However, col. 6, lines 36-38, clearly state that “40” and “41” represent two laterally disposed burners. There is no distinction between a heating means and an injector means because this reference suffers from the same problems as the prior art mentioned in the background of the pending specification. Namely, the nozzle of the injector means and the heating means (each of 40 and 41) are positioned together which causes a cold area on the preform.

In view of the foregoing, Applicants respectfully submit that claim 1 is not anticipated by Powers. Moreover, the dependent claims are patentable for at least the same reasons as claim 1, by virtue of their dependency therefrom.

Conclusion

In view of the foregoing, the claims are now believed to be in form for allowance, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to contact the undersigned at the telephone number listed below.

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Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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Date: October 11, 2001

Attorney Docket No.: Q58134

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

1. (Twice Amended) A method of fabricating an optical fiber preform including a step of outside deposition of silica possibly doped with at least one dopant by injecting at least one substance in the form of silica or a precursor of silica in the vicinity of a heating area created by heating means during at least one pass of [injector means and] said heating means and an injector means associated with said heating means along a longitudinal axis of said preform, during which the relative positions of said injector means and said heating means are adjusted with respect to each other, so that said silica is deposited in said heated area regardless of the position of said heating means.